



On

PLANET



GSA

*Drive **Green** With*

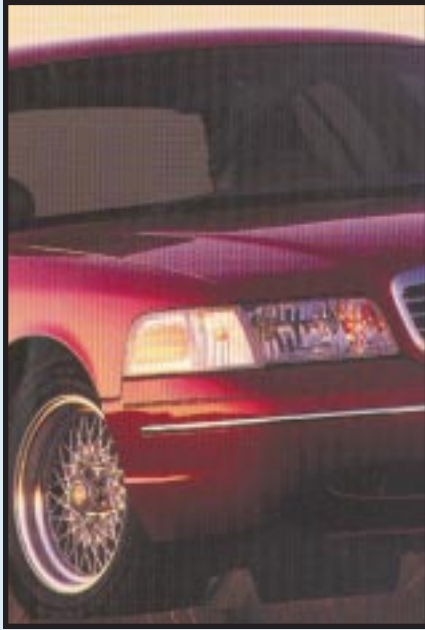
DAVE

**Drive
Alternative Fuel
Vehicles
Easily**



U.S. General Services Administration
Federal Supply Service

Office of Vehicle Acquisition and Leasing Services



Drive Alternative Fuel Vehicles Easily

GSA's Office of Vehicle Acquisition and Leasing Services is a full service provider for Federal agencies' vehicle requirements. We offer a variety of alternative fuel vehicles (AFVs) to assist in meeting your acquisition and leasing needs. These vehicles are production line models with all of the features and amenities you would expect to get from gasoline powered vehicles. AFVs have the added benefit of reducing harmful emissions in the air and reducing our nation's dependence on foreign oil. We hope you will support our Planet GSA Program and "Drive **Green** with GSA". Our organization is known for its family named programs which provide an extensive choice of vehicles. Our Alternative Fuel Vehicle program is named **DAVE** to send the message: **Drive Alternative Fuel Vehicles Easily**.

Q. What are Alternative Fuels?

A. The Energy Policy Act of 1992 (EPACT), defines alternative fuels as: "methanol, denatured ethanol, mixtures containing up to 85% methanol or denatured ethanol, natural gas, propane (liquefied petroleum gas), hydrogen, and electricity."

Q. Why use Alternative Fuels?

A. Air quality and energy security are two major national issues. Our nation's health and energy security are currently at risk due to dependence

on petroleum as the primary energy source for vehicles. Highway vehicles account for 60% of all pollution in urban areas (aircraft accounts for 1.1% of all pollution in urban areas), and consume over 50% of all oil used in the U.S.

Q. How does GSA help?

A. GSA provides Federal agencies with clean, alternative fuel vehicles. We have purchased over 25,000 AFVs directly from automotive manufacturers for our Federal customers, more than any single organization in the U.S.



Important Information About AFVs

Q. Why do fleets acquire Alternative Fuel Vehicles?

- A. There are both legislative and regulatory mandates that require AFV acquisitions for use in Federal fleets.

Energy Policy Act of 1992 (EPACT)

- Mandates the use of light duty AFVs in "covered" Federal fleets (fleets operating in a metropolitan statistical area (msa) with 50 or more vehicles, 20 of which are capable of being centrally fueled, barring exceptions).
- FY2000 and thereafter: 75% of all covered light duty vehicle acquisitions must be AFVs (law enforcement vehicles and vehicles located outside the 125+ msa's covered by EPACT are exempt).

Executive Order 13031

Reaffirmed the Administration's commitment to acquire AFVs for the Federal fleet.

- Requires each Federal agency to comply with this law, whether they lease or buy vehicles from GSA.
- Requires Federal agencies to formulate their compliance based on existing and requested funds; limited appropriations is not an exemption.
- Department of Energy (DOE) provides incremental funding for electric vehicles.
- Provides for AFV credits.

EPA's Clean Fuel Fleet Program (CFFP)

The Clean Air Act Amendment of 1990 (CAAA) requires Federal fleets to acquire low emission vehicles (LEVs) in the following locations: (50% of all Federal fleet light duty acquisitions for FY2000 must have an LEV rating).

- Atlanta, GA
- Chicago, IL (and surrounding counties)
- Milwaukee, WI (and surrounding counties)
- Denver-Boulder, CO

Q. What types of alternative fuel vehicles are currently available?

- A. There are 3 types of AFVs available: flexible fuel, bi-fuel and dedicated vehicles.

Flexible fuel vehicles (FFVs) have only one fuel tank. Flexible fuel vehicles are designed to operate on alcohol, gasoline or any combination of both. The vehicle's fuel system automatically adjusts the engine, depending on what type of fuel or mixture is being used.

Bi-fuel vehicles can run on either alternative or conventional fuel. Bi-fuel vehicles have two fuel systems: the driver can switch to operate on either alternative fuel or gasoline. Bi-fuel vehicles offer the benefit of flexibility when compressed natural gas (CNG) or liquefied petroleum gas (LPG) is not readily available.

Dedicated vehicles run on one fuel only. A dedicated AFV has one fuel system and is designed to run exclusively on alternative fuel. Dedicated vehicles are available with CNG, LPG or electric.

Electric vehicles (a dedicated vehicle type) do not have engines. Electric vehicles (EVs) are propelled by an electric drive motor. The motor is provided energy from a battery pack. Battery packs consist of hi-voltage multiple batteries that deliver electrical power to the vehicle's drive motor. Electric vehicles must be recharged with special hi-voltage battery chargers.

Q. What types of alternative motor fuels are available?

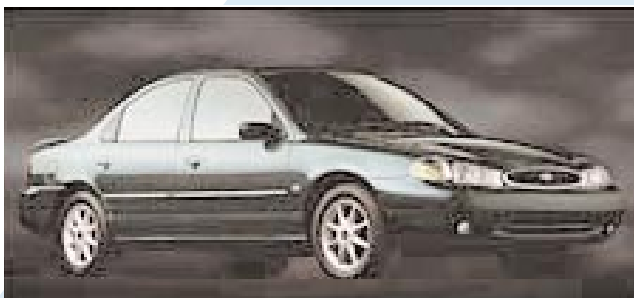
- A. Electricity, ethanol, natural gas and propane are available as motor fuels for light duty vehicles. GSA is fuel neutral and offers a wide range of vehicles capable of operating on these types of alternative motor fuels.

Electric vehicles run exclusively on battery power. Electric vehicles emit the least amount of pollutants of all AFVs offered. However, the driving range of electric vehicles is very limited compared to original equipment manufacturer's (OEM's) conventional vehicles. Electric vehicles currently under contract include pickup trucks and minivans.

Ethanol is a liquid alcohol fuel that can be made from corn, grains or agricultural waste. Ethanol is a renewable energy source and is domestically produced. Ethanol powered vehicles have good performance and emissions characteristics. Ethanol is stored in a liquid form making it very similar to gasoline in handling procedures. Ethanol is most commonly found in a mixture of up to 85 percent ethanol and 15 percent unleaded gasoline (E85). Midsize sedans, compact pickups, and minivans are available to operate on ethanol fuel.

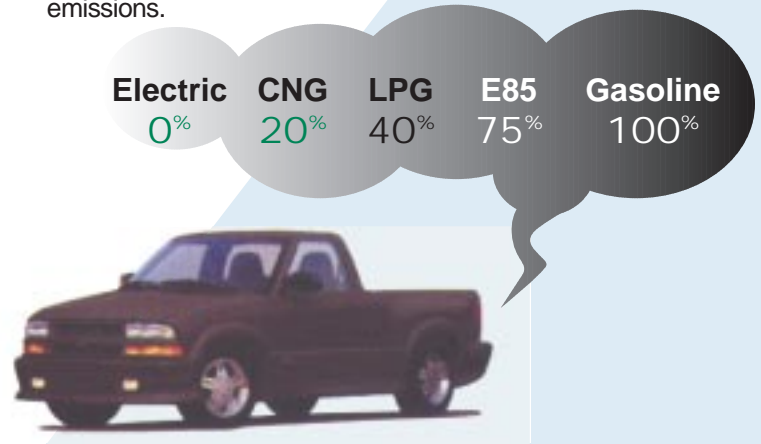
Natural gas is a domestically available, odorless gas. Compressed natural gas (CNG) is typically stored and dispensed at 3000-3600 psi. Many different types of natural gas vehicles are currently available. These include compact sedans, fullsize pickups, medium and heavy trucks, fullsize vans (passenger, cargo and parcel), buses and specialty vehicles.

Propane (LPG) is a domestically available fuel. LPG vehicles operate cleanly and have good performance characteristics and range. LPG is most commonly found as a by-product of petroleum refining or natural gas processing. While LPG is a gas, it becomes a liquid when pressurized to 125 psi. Fullsize pickups, medium and heavy trucks and vans powered by propane are available.



Q. Do AFVs offer emissions benefits?

- A. Yes, all of the AFVs reduce ozone-forming tailpipe emissions. The following diagram shows the percentage of combined carbon monoxide (CO) and nitrogen oxide (NoX) emissions for each alternative fuel as compared to gasoline. For example, the emissions from CNG vehicles are estimated to be 20% compared to 100% emissions from vehicles using gasoline. CNG vehicles demonstrate an 80% reduction in ozone-forming emissions. Emissions from electric vehicles are 0%, because electric vehicles do not emit any exhaust emissions.



Q. Where can I get fuel for my AFV?

- A. While the number of alternative fueling stations in the U.S. is increasing, their total numbers are still low and finding fuel can be difficult. Refueling site information is available through the National Alternative Fuels Hotline or through their Internet site (see AFV Information Sources).

Q. How do I purchase an AFV?

- A. Customer agencies interested in buying AFVs may submit requisitions by mail or fax to the GSA Automotive Division on either the GSA Form 1781 (Motor Vehicle Requisition), or the Standard Form 344 (Multiuse Standard Requisitioning/Issue System Document). Department of Defense activities may use the DD Form 448 (Military Interdepartment Purchase Requisition). Orders can also be submitted in an electronic file format.

Q. How do I lease an AFV?

- A. Customers interested in leasing electric, ethanol, natural gas and propane AFVs can contact their servicing Fleet Management Center or call (703) 305-6278 for more information. Additionally, customers may utilize the Automotive Division's contracts to lease **only** electric vehicles. To contact the Automotive Division call (703) 308-CARS.

Q. Is there any funding assistance?

- A.** GSA Fleet has earmarked up to \$4,000,000 in matching funds to provide funding assistance to customer agencies interested in participating in the Federal Government's AFV USER Program. This initiative is an effort to improve alternative fuel use by Federal fleet operators and provide a model for other cities to follow. The cities in this program are:

1. Albuquerque, NM
2. Denver, CO
3. Kennedy Space Center
(Melbourne - Titusville), FL
4. Minneapolis, MN
5. Salt Lake City, UT
6. San Francisco, CA

The DOE also provides funding assistance to Federal fleets for electric vehicle acquisitions. DOE will fund up to 50% of the incremental cost of an electric vehicle (not to exceed \$10,000 per acquisition).

Q. What manufacturers are on contract with GSA?

- A.** We have AFVs available from the following manufacturers. As technology changes, new products will be added to our **DAVE** program.

Ford Motor Company
General Motors Corporation
DaimlerChrysler Corporation
American Honda Motor Co.
Freightliner Corporation
Blue Bird Corporation
Altec Industries

Available Vehicles Include:

Sedans
Pickup Trucks
Buses
Vans
Medium Duty Delivery Trucks
Specialty Vehicles

Commonly Used Alternative Fuel Acronyms

AFV	Alternative fuel vehicle
Bi-fuel	Two separate fuel systems
Dedicated	One fuel system
FFV	Flexible fuel vehicle
LEV	Low emission vehicle
CNG	Compressed natural gas
E85	Blend of up to 85% ethanol and 15% gasoline
EV	Electric vehicle
LPG	Liquefied petroleum gas (Propane)
EPACT	Energy Policy Act of 1992
CAAA	Clean Air Act Amendments of 1990
CFFP	EPA's Clean Fuel Fleet Program





AFV Information Sources

Vehicle Manufacturers

DaimlerChrysler Products:
1-800-999-3533

Ford Products: 1-877-ALT-FUEL

General Motors Products:
1-800-25Electric, or 1-888-GM-AFV-4U (CNG)

American Honda Motor Company: 1-888-CC-Honda

Freightliner: 1-888-633-6918

Blue Bird Corporation: 912-757-7117

Altec Industries: 205-991-7733

Websites

www3.daimlerchrysler.com

www.ford.com

www.gm.com

www.honda.com

www.freightliner.com

www.blue-bird.com

www.altec.com

Other Sources

National Alternative Fuels Hotline: 1-800-423-1363

U.S. DOE's Clean Cities Program: 1-800-Ccities

Environmental Protection Agency Website:

Websites

www.afdc.doe.gov

www.ccities.doe.gov

www.epa.gov

Let us help you identify the right AFVs for your fleet
For more information on DAVE visit us at:
pub.fss.gsa/motor

For Buying

Automotive Division
(703) 308-CARS

For Leasing

Fleet Management Division
(703) 305-6278

To find out more information about
Planet GSA's Environmental Programs
Visit us at:
www.gsa.gov/planetgsa

